

# RECLAMATION

*Managing Water in the West*

## DRAFT FINDING OF NO SIGNIFICANT IMPACT

# Antelope Valley Water Bank Initial Recharge and Recovery Facility Improvement Project

FONSI-09-112

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U.S. Department of the Interior  
Bureau of Reclamation  
South-Central California Area Office

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## Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act of 1969 (NEPA), as amended, the South-Central California Area Office of the U.S. Bureau of Reclamation (Reclamation), has determined that the approval to partially fund Semitropic-Rosamond Water Bank Authority's (SRWBA) Antelope Valley Water Bank (AVWB) improvement project is not a major federal action that would significantly affect the quality of the human environment and an environmental impact statement is not required. This Finding of No Significant Impact (FONSI) is supported by Reclamation's draft Environmental Assessment (EA) number EA-09-112, *Antelope Valley Water Bank Recharge and Recovery Improvement Project*, and is hereby incorporated by reference.

## Background

The American Recovery and Reinvestment Act (Recovery Act) of 2009 is a bill signed into law by President Barack Obama on February 17, 2009 in an effort to jumpstart the nation's economy, create and/or save jobs, and foster unprecedented levels of accountability and transparency in government spending. The Department of the Interior has been tasked with managing \$3 billion in investments as part of the Recovery Act, of which Reclamation will devote \$260 million for projects in the State of California to expand water supplies, repair aging water infrastructure, and mitigate the effects of a devastating drought that the State is currently experiencing. Through a Challenge Grant, Reclamation provides 50/50 cost-share using Recovery Act funds for approved projects focused on water conservation, efficiency, and marketing. Selected projects were scheduled to expend funds quickly and that would be completed by September 30, 2010.

SRWBA applied for and was selected as a potential recipient to receive a Recovery Act-funded Challenge Grant to help with the construction of improvements to their Antelope Valley Water Bank (Proposed Action). The Proposed Action would consist of improvements to an existing 160-acre recharge basin by building up the levees, development of a new 160-acre recharge basin, a new turnout, and the installation of up to nine recovery wells with associated pipelines.

## Findings

### Water Resources

The Proposed Action would not generate a new supply of water; rather, it would improve the reliability of Antelope Valley and the region's water resources by recharging available surplus surface water for later use when groundwater pumping is necessary. The Proposed Action does not include additional groundwater pumping; therefore, it would not contribute to ground subsidence and water-level impacts associated with groundwater pumping. Banking participants would be required to leave behind ten percent of its stored water in the groundwater basin for recharge. There would be no adverse impacts to water quality since the quality of State Water Project supplies and that of the groundwater are similar. The Proposed Action would improve the overall groundwater basin and improve water resources management in the Antelope Valley region.

Therefore, the Proposed Action would have slight beneficial impacts to water resources.

## **Land Use**

The Proposed Action would involve approximately 160 acres of farmland being converted into a water bank. When not being used for recharge, the basins would be used for organic farming a minimum of 8 months out of the year. Recovery wells and recharge basins are considered to be related uses for agriculture and is therefore compatible within agricultural preserves established under the Williamson Act contract. Therefore, the Proposed Action would have no significant impacts to land use.

## **Biological Resources**

The Proposed Action could have temporary and permanent impacts on biological resources in the project area. Temporary impacts could occur during the construction period, and would be within temporary equipment staging and equipment movement areas and the alignment of the new delivery pipeline. The potential for impacts to wildlife and special-status species would be limited, since the project would be largely constructed within the existing recovery wells and associated pipelines.

The Proposed Action could affect listed species if they were present. By following Environmental Protection Measures, this could avoid or minimize any potential impacts to burrowing owl, Swainson's hawk, and other listed species during construction. Therefore, the Proposed Action is anticipated to have no significant impacts on biological resources.

## **Cultural Resources**

The Proposed Action involved activities that include excavation and these actions have the potential for impacts to historic properties. Identification efforts were conducted and revealed that no historic properties were present within the project footprint. Reclamation, therefore determined that the proposed action would result in no historic properties affected. The State Historic Preservation Officer concurred with this finding on January 26, 2010. In the unlikely event that project implementation revealed previously unidentified cultural resources, then procedures outlined at 36 CFR Part 800.13(B) would be followed to ensure that significant impacts to cultural resources are avoided.

## **Indian Trust Assets (ITA)**

There are no tribes possessing legal property interests held in trust by the United States in the lands involved with the Proposed Action, the nearest ITA is a Public Domain Allotment approximately 36 miles north/northeast of the project location. The Proposed Action would have no significant impacts to ITA.

## **Socioeconomic Resources**

Over the long term, the Proposed Action would facilitate an increase in the reliability of the region's surface water supply. This would subsequently help to maintain the economic viability of irrigated agriculture within the Antelope Valley. However, the recovered water would most likely be used for municipal and industrial (M&I) purposes; therefore, the Proposed Action would have no adverse impacts on socioeconomic resources.

## **Environmental Justice**

To the extent that water supply reliability is improved in the Antelope Valley, it would serve to support the continued viability of available M&I water to the surrounding communities. As a result, there would be beneficial impacts to environmental justice from the implementation of the Proposed Action.

## **Air Quality**

Short-term air quality impacts would be associated with construction, and would generally arise from dust generation (fugitive dust) and operation of construction equipment. Fugitive dust results from land clearing, grading, excavation, concrete work, and vehicle traffic on paved and unpaved roads. The Proposed Action would include Environmental Protection Measures to reduce the amount of fugitive dust released from these construction activities.

Comparison of the estimated Proposed Action emissions with the thresholds for Federal conformity determinations indicate that project emissions are estimated to be below these thresholds. Therefore, there will be no significant impacts to air quality.

## **Global Climate Change**

The Proposed Action would involve short-term impacts consisting of emissions during construction and long-term impacts are attributable to project operations and would involve the generation of electrical energy to power the electric motor pump drivers. Accordingly, project construction and operations under the Proposed Action would result in *de minimis* impacts to global climate change.

## **Cumulative Impacts**

It is anticipated that the AVWB would increase in size as banking partners are added until the entire project is completely built out as analyzed in the EIR. Due to the flexibility of the AVWB, it is possible to add and construct future elements as needed in a phased approach. A major consideration in the development of the project is to provide the operational flexibility to meet the needs of the future banking partners. The changing conditions of California water supplies help to dictate the flexibility required to maintain and develop the rest of the AVWB. Aside from the two existing water bank users, other potential banking partners are speculative at best.

The Proposed Action would improve water resources management in the region by increasing the absorption of available water supplies, particularly during “wet-years”. The long-term operation of the AVWB would result in a cumulative positive impact on groundwater levels by contributing to the protection of the local aquifer from overdraft. The AVWB operation allows for 10 percent of banked water to remain in the Antelope Valley groundwater basin which is a positive contribution to the underlying aquifer and ground subsidence throughout the region.

At full build-out, the AVWB would encompass an 18-square mile area totaling roughly 13,440 acres, of which 1,482 acres would be dedicated for spreading basins. The remaining property would continue to be farmed as has historically occurred and would not be disturbed. Operation flexibility of the AVWB would allow basins to be rotated: while not being used for recharge, the remaining basins would be farmed as has historically occurred. The development of recovery

wells and recharge facilities is considered to be an incidental agricultural use; therefore, there would be no cumulative adverse impacts to land use.

The full build-out of the AVWB project, of which the Proposed Action is a part of, was analyzed and found that air quality impacts would result from the construction and operation of the project over two separate phases. At best, each phase could be completed within a single year; however, the second phase of the project would not be able to start before the completion of the first phase. Annual construction and operation emissions for each phase of the overall AVWB project were still estimated to be well below the federal thresholds. Therefore, the Proposed Action would not contribute to cumulative adverse impacts to air quality.

Greenhouse gas impacts are considered to be cumulative impacts. Full build-out of the overall AVWB project could contribute to global climate change impacts due to emissions of CO<sub>2</sub> from project operations. However, the estimated CO<sub>2</sub> emissions from annual generation of electricity required to operate every proposed well for the AVWB project is still well below the 25,000 metric tons per year threshold for reporting GHG emissions. As a result, the Proposed Action is not expected to contribute to cumulative adverse impacts to global climate change.